Preliminary Amendment USSN 09/903,685

Attorney Docket No.: 020245.0105

## Amendments to the Claims

Claims 1-44 were previously canceled. Please add new claims 46-56 as set forth below. After adding new claims 46-56, please cancel claim 45 in it entirety without prejudice or disclaimer.

Claims 1-45 (canceled)

46. (new) A method comprising

applying a continuous stream comprising O, gas to a material in a biological burden reduction chamber, wherein said O<sub>x</sub> gas comprises O<sub>1</sub>/O<sub>2</sub> and O<sub>3</sub>/

on chamber, wherein said O<sub>x</sub> gas comprises O<sub>1</sub>/O<sub>2</sub> and O<sub>3</sub>:

applying a vacuum within the biological burden reduction chamber; and
include steps
maintaining a pressure within the biological burden reduction chamber at about 0 to about
of withdra
47. (new): The method of claim 46, further comprising agitating the O<sub>x</sub> gas in the biological

(inv)

(inv)

(inv) 20 psia.

burden reduction chamber.

- 48. (new): The method of claim 46, wherein the O<sub>x</sub> gas in the biological burden reduction chamber is maintained at a concentration of about 0.1% to about 25% by volume of total gas in the biological burden reduction chamber.
- 49. (new): The method of claim 46, wherein the Ox gas in the biological burden reduction chamber is maintained at a concentration of about 3% to about 16% by volume of total gas in the biological burden reduction chamber.
- 50). (new): The method of claim 46, further comprising creating a pressure differential between the biological burden reduction chamber and an Ox gas generation cell, which pressure differential is maintained while applying the stream comprising O, gas to the material.
- 51. (new): The method of claim 46, wherein a temperature within the biological burden reduction chamber is between about 32°F and about 80°F.

Preliminary Amendment USSN 09/903,685 Attorney Docket No.: 020245.0105

- 52. (new): The method of claim 46, wherein a flow rate of said continuous stream of O<sub>x</sub> gas is between about 0.1L/min/ft<sup>3</sup> and about 2L/min/ft<sup>3</sup>.
- 53. (new): The method of claim 46, further comprising applying a stream of one or more gases selected from the group consisting of N<sub>2</sub>, CO<sub>2</sub> and Ar to the biological burden reduction chamber.
- 54. (new): The method of claim 46, wherein said  $O_x$  gas in said biological burden reduction chamber is maintained at a concentration of about 0.1% to about 100% by volume of total gas in the biological burden reduction chamber.
- 55. (new): The method of claim 46, wherein a pressure within the biological burden reduction chamber is maintained between about 5.5 psia and about 9 psia.
- 56. (new): A method comprising

  creating a vacuum within a biological burden reduction chamber;

  applying a stream of O<sub>x</sub> gas into a biological burden reduction chamber; and

  simultaneously withdrawing O<sub>x</sub> gas out of the biological burden reduction chamber, wherein

  the O<sub>x</sub> gas comprises O<sub>1</sub>, O<sub>2</sub> and O<sub>3</sub>.